### What You Need To Know About



### Potassium Iodide (KI)

#### What Is Potassium lodide?

Potassium iodide is a chemical compound that contains iodine, which is necessary for the normal functioning of the thyroid gland. It is known by its chemical symbol, KI, and it is used to put the iodine in iodized salt. Most people ingest it every day without being aware of it.

KI is also manufactured in pill form to be used to prevent the thyroid from absorbing radioactive iodine that might be released during an accident at a nuclear power plant. It is intended to protect against thyroid cancer caused by radioactive iodine.

#### **How Does It Work?**

KI protects the thyroid gland by satisfying its requirement for iodine. If someone were then exposed to radioactive iodine, it would not be absorbed by the thyroid. The gland cannot tell the difference between radioactive and non-radioactive forms of iodine, so KI functions by providing the thyroid with a safe form of all the iodine it needs. It is designed to be used with other emergency measures, such as evacuation.

Potassium iodide has no effect at all on radiation itself. It does not provide protection for parts of the body other than the thyroid and it provides no protection against forms of radiation other than radioactive iodine. Only distance from the source of radiation provides complete protection. That is why evacuation remains the primary protective action during a radiological emergency!

#### Who Can Take KI?

Most people can take KI without side effects, but it is an over-the-counter medication and you should consult your doctor before taking it. A small number of people could have an adverse reaction. Anyone with an existing thyroid condition and those allergic to iodine or shellfish should NOT take it.

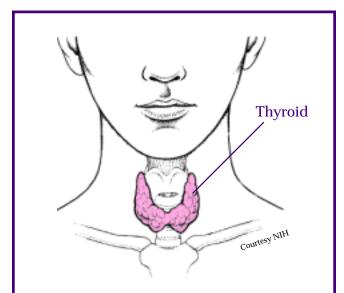
#### Where Can I Get KI?

One KI pill is being distributed free-of-charge by the state health department to everyone who lives or works in New Hampshire towns located in the 10-mile Emergency Planning Zones (EPZ) around Seabrook Station and Vermont Yankee nuclear power plants.

Potassium iodide is also being distributed to schools and to child care agencies in the two EPZs.

For those who wish to do so, KI can be bought in some local pharmacies or ordered by telephone, mail or via the Internet from two manufacturers. (See the "KI Application Form" for further details.)

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Your thyroid is a butterfly-shaped organ found in the throat. Potassium iodide fills it up so radioactive iodine does not get in. Remember that KI is not an "anti-radiation" pill. It protects this one organ from one kind of radiation! You are still at risk of being exposed to radiation. So evacuate the area under the direction of emergency officials.

#### How Will I Know When To Take It?

To be effective, KI should be taken immediately before or within a few hours after exposure to radiation. You should take it **only** at the direction of state public health officials, who will decide the most appropriate time to do so. That recommendation will be announced through the Emergency Alert System and the news media. People living or working within the EPZs should review their Emergency Public Information calendars for details on emergency notification.

# What Would Happen If I Took KI Without Being Told To?

Probably nothing. It is very unlikely that you would suffer any ill effects if you took KI because of a false alarm or "just in case" because you thought there was a radiological emergency under way. The KI would simply pass through the body in a day or two. Of course, you would have to obtain more in case of a real emergency.

#### Should I Have KI For My Children?

Very young children are more susceptible to thyroid cancer than adults because they are growing rapidly. Therefore, you should request KI for not only the adults in your home but also for any children.

Potassium iodide presently comes in 130-mg pills, which is the recommended adult dosage. Children and pregnant or nursing women take a smaller amount of KI. (See chart on this page)

Understanding that it may be difficult to cut the KI tablets into smaller portions and give them to children, the US Food and Drug Administration says that - in a declared radiological emergency parents may give a 130-mg tablet to children. The overall benefits of doing so far outweigh the risks of overdosing.

Children can receive their dose of KI in water, milk, applesauce or pudding to make it easier to swallow.

#### Where Should I Store The Pills?

Like any other medication, KI should be stored at room temperature away from moisture. It should also be kept in an accessible location, so you remember where it is and can get it in case of emergency. Replace your KI pills every five years when they expire. The expiration date is on the foil packet.

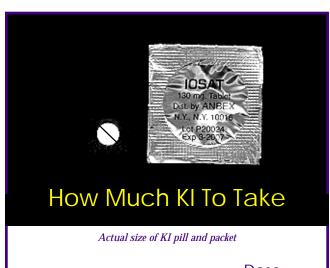
# Who Assumes Legal Liability For Using KI?

You do. The use of KI is voluntary. No one is required to accept it or use it. If you choose to accept KI from the state distribution program you will be required to sign an informed consent form on which you state that you understand its use and potential risks. If you purchase KI on your own you also accept liability for its use as you would with any other over-the-counter medication.

#### For More Information...

NH Department of Health & Human Services
Office of Community & Public Health
Bureau of Radiological Health
29 Hazen Drive
Concord. NH 03301-6504

800-697-7919



Adults 18 Years And Older 1 Tablet
Pregnant Or Nursing Women 1/2 Tablet
Children Ages 3-18 Years Old 1/2 Tablet\*
Children 1 Month to 3-Years-Old 1/4 Tablet\*
Infants 1 Day to 1-Month-Old 1/8 Tablet\*

\* NOTE: In an emergency situation where it is not possible to cut a tablet into these sizes, administer the **complete** 130-mg tablet. The benefits of doing so far outweigh the risks of overdosing!